EMPLOYEE INVESTMENT SYSTEM

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims the benefit of the filing date of co-pending provisional application U.S. Ser. No. 60/190,377, filed March 17, 2000, entitled "Employee Investment System" to Calce et al.

STATEMENT OF FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not Applicable

BACKGROUND OF THE INVENTION

1. TECHNICAL FIELD

This invention relates in general to investment systems and, more particularly, to an investment system for low-wage or transitory workers.

2. DESCRIPTION OF THE RELATED ART

Every wage earner has a need to invest at least a portion of his or her earnings. Many workers are able to invest money in a retirement plan and/or other investment vehicles. Retirement plans provide at least two significant benefits to participants. First, for people who have trouble saving money, a retirement plan can take an agreed upon amount from the participant's paycheck, thereby automatically providing discipline. Second, even for people who are diligent savers, money can be invested in stocks and bonds that

historically have a greater rate of appreciation than simple interest provided by a savings account or certificate of deposit.

Nonetheless, many employers do not provide investment options to their employees. This is particularly true for certain categories of workers, particularly low-wage or transitory workers. Restaurant employees are typical of this worker category, although other groups, such as hotel workers and salespeople, would fall into this category as well, since a large percentage of their earnings come from gratuities/commissions, rather than wages, and because they switch jobs frequently. Even if a restaurant worker was diligent about saving money, the opportunities for investment would be limited to relatively small amounts of money and very few investment advisors would be interested in maintaining such a small account.

Accordingly, a need has arisen for an investment system that accommodates the transitory and low wage workers.

BRIEF SUMMARY OF THE INVENTION

The present invention provides an investment system including employer management circuitry for receiving information regarding sales and credit/debit gratuities for each participating employee of an employer, calculating settlement amounts for employees according to predefined preferences for withholding investment amounts, and generating a investment database of investment amounts associated with the employees. Account manager circuitry receives the investment database and coordinates the investment of the investment amounts with an investment provider.

The present invention provides several significant benefits, particularly for transitory or low-wage employees. From the standpoint of the employee, relatively small amounts of money can be withheld from gratuities/commissions for saving. The investments can follow the employee to each new employer without penalty. While the accounts for these employees may be small in the initial stages, the ability to continue the account after a job change allows the accounts to grow to significant values. The employee can design a withholding plan as a fixed amount, percentage of wages/gratuities/commissions, a percentage of sales, or a combination of factors.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

For a more complete understanding of the present invention, and the advantages thereof, reference is now made to the following descriptions taken in conjunction with the accompanying drawings, in which:

Figure 1 illustrates a block diagram of an investment system;

Figure 2 illustrates a state diagram of the basic operation of the investment system of Figure 1;

Figures 3a and 3b illustrate alternative embodiments of employer equipment for implementing the investment system;

Figure 3c illustrates the steps in calculating an employee settlement;

Figures 4a and 4b illustrate diagrams of cash flows in the investment system; and

Figure 5 illustrates a self-deposit terminal for discretionary investments.

DETAILED DESCRIPTION OF THE INVENTION

The present invention is best understood in relation to Figures 1-5 of the drawings, like numerals being used for like elements of the various drawings.

Figure 1 illustrates an overall functional block diagram of a preferred embodiment of an investment system 10 that easily accommodates the types of workers who are least likely to invest, with a minimal burden on the employers. Employers 12 provide their employees 14 with the opportunity to invest a portion of their earnings, as described in detail below, in a third party investment plan. An Account Manager 16 coordinates database management and monetary transfers between the employer 12 (or the employer's financial institution) and one or more Investment Providers 18. The Account Manager 16 includes an Information Manager 20 to maintain financial and demographic information on all employees in the investment plan and a Broker/Dealer 22 for managing money transfers for investments. Optionally, an employee can also direct money to an investment account via self-deposit terminals 24.

The Information Manager 20 may be implemented on a SQL (or other) database server with an Internet connection. Similarly, the functions of the Broker/Dealer 22 may be implemented on a SQL database server. The functions of the Account Manager 16 could be provided by two separate entities, i.e., a separate Information Manager 20 and Broker/Dealer 22, or by a single entity that performs both functions. Further, the Information Manager and/or Broker/Dealer functions could be integrated into the operations of an Investment Provider 18. For purposes of illustration, it will be assumed that the Information Manager 20 and Broker/Dealer 22 are separate entities apart from the Investment Provider 18.

Each employee is given a unique account number. The account number belongs to the employee 14, not the employer 12, and the account can be

transferred by the employee from one employer 12 to another employer. The employee can, in the preferred embodiment, manage account details either through his or her employer or through a connection directly to the Account Manager, such as an Internet connection or a touch-tone phone, or through the Investment Provider 18. In one embodiment, each employee uses his or her social security number as the unique account number.

Figure 2 shows a state diagram that outlines the basic operation of the investment system 10. In state 30, an employee 14 initiates his or her account with an employer who is participating in the investment program. The employee is given an account number through the Account Manager 16. In state 32, personal information and investment preference information is recorded in the Information Manager 20. The personal information would include, for example, full legal name, address, phone numbers, and a password for accessing information regarding the account. The investment preferences define the manner in which money is withheld by the employer on behalf of the employee and how the money is invested by the Account Manager 16 on behalf of the employee. The withholding preferences could include a percentage of wages/tips/commissions received, a percentage of sales, a set amount, or a combination of factors. The investing preferences could provide several investments into which the employee chooses to invest his or her money, such as different mutual funds and money market accounts. The employee may choose to split the withheld money between several accounts. Alternatively, the employer could limit employee preferences for withholding and/or investing the withheld money to one or more options chosen by the employer.

After the personal information and investment preferences are entered, money is automatically withheld on behalf of the employee in conformance with the employee's instructions in state 34. Changes to the personal information and/or the investment preferences are preferably made by the employee through

the employer. Modified information is periodically sent from the employers 12 to the Account Manager 16 for archival storage. Alternatively, information could be modified and monitored through a direct data connection between the employee 14 and the Account Manager 16 (for example, through the Internet) or through a dedicated terminal, such as self-deposit terminal 24.

In the event that an employee changes jobs (to another employer 12 which offers the investment plan), the account information is associated with the new employer in state 36. Changes to the investment preferences, if any, are then made in state 32. The employee maintains the same account number - the only difference is that the new employer 12 is now responsible for withholding the investment money and forwarding the money to the Account Manager 16. It would also be possible for an employee 14 to have a single account that covered employment under two different employers.

Figure 3a illustrates a first embodiment of the employer equipment for implementing the investment plan. In this embodiment, the software for administering the investment plan is executed in conjunction with a POS (point of sale) system 40 of the type typically used in restaurants, hotels or retail stores. For purposes of illustration, the POS system shown in Figure 3a shows information flows that would be typical of a restaurant POS. The POS system 40 receives receipt and tip information throughout a worker's shift. For each waiter, the POS system 40 keeps track of each bill associated with a waiter's table and each payment received, along with tip amounts. At the end of a shift, the waiter will either be owed money due to credit/debit card tips and wages or owe money due to cash receipts not accounted for, less credit/debit card tip and wages. The POS system 40 also communicates with one or more financial institutions for credit/debit card payments associated with the customer bills. This functionality is available from present day POS systems.

In the embodiment of Figure 3a, the POS system 40 includes integrated investment processing software 42. This software provides several functions. First, it maintains the personal information and investment preferences described above. Second, the investment processing software 42 computes the investment withholding for each employee in accordance with the employee's preferences. Third, it computes the settlement, accounting for the employee's investment withholding. Fourth, it communicates with the Account Manager 16.

Figure 3b illustrates an alternate embodiment of the employer equipment, where the POS system 40 is separate from the investment processing system 46. Typically, the investment processing system 46 is implemented on a personal computer. In this embodiment, the POS system 40 provides the typical settlement information for an employee, i.e., a settlement statement without any investment withholding. This information is passed to the investment processing system 46, either manually (by entering each employee's settlement information along with wage and tip information for computing the withholding) or automatically. The investment processing system 46 computes the withholding according to the employee preferences and re-computes the settlement in view of the withholding. The investment processing system 46 also performs the communication with the Account Manager 16.

In the preferred embodiment, the employment investment software 42 or employment investment system 46 stores a minimal amount of data for each employee, with the Information Manager 20 of the Account Manager 16 maintaining a database of more detailed information. The employment investment software 42 or employment investment system 46 need only store the preference information for computing the withholding and simple personal information for each employee. Other data for each employee, such as social security number, address, investment preferences, historical account information, and so on, can be stored in the Information Manager 20 and

downloaded to the employment investment software 42 or employment investment system 46 as necessary.

The functionality of the POS system 40 could be a dedicated processing device located at the business location or it could be a centralized system, accessible through a wide area network (WAN), global network (such as the Internet), or other communication link.

Figure 3c illustrates how a settlement is performed using the integrated investment processing software 42 in connection with a POS system 40 or using the adjunct investment processor in connection with a POS system 40. The POS system 40 maintains an account of all sales during an employee's shift, whether debit/credit card or cash. The POS system also knows the amount of credit/debit tips the employee has received. Typically, during the day, the employee will keep all cash receipts for sales and tips. Accordingly, at the end of a shift, the employee will owe the restaurant a sum equal to the total sales, less the amount of debit/credit tips and the amount of the employee's investment. If the employee had mostly credit card sales and tips, the restaurant may owe the employee at the time of the settlement.

The amount of the employee's investment for a shift may be derived by (1) fixed investment (for example, $10 per shift), (2) a percentage of the tips received, or (3) a percentage of the sales, or (4) a combination of factors (for example, $10 plus 2% of sales). In situations where a significant portion of the employee's tips are cash, the employee would need to report the amount of cash tips in order to calculate a percentage of tips.

Figures 4a and 4b illustrates monetary and information flows in the investment system 10, using the example of a restaurant chain (the "Company"). Figure 4a illustrates a first embodiment where the Broker/Dealer 22 manages the transfer of money, but does not actually hold the money. In this embodiment,

the POS 40 or Adjunct Investment Processor 42 for each restaurant uploads gratuity information (along with the other sales information that is normally reported) to the main company processor 50, typically after the store closing each night. If the POS 40 and/or the Adjunct Investment Processor 42 are located remotely from the physical location of the restaurant, either to a designated company site or to a third party system over a communications link, this step is performed as the data is entered. The information from each restaurant is consolidated into a single database structure (the "Consolidated Daily Total"), specifying the amount of investment withheld the settlement for each employee. This information is uploaded to the Information Manager 20, typically through a secure electronic transfer protocol link through a telephone or Internet connection. Other information, such as changes in demographic information or investment preferences can also be uploaded at this time.

The Information Manager 20 processes information from the Consolidated Daily Total from the main company processor 50. The Information Manager 20 determines a technical support fee, typically based on the number of transactions involved in the consolidated daily total. This amount is invoiced to the Company's Bank 52 and is kept by the entity providing the Information Manager service. The Information Manager 20 also determines a Daily Investment Total, which would be equal to the total amount invested in the Consolidated Daily Total, less the technical support fee, and sends the Daily Investment Total information to the Company's Bank 52 via a secure electronic transfer protocol connection. In addition, the Information Manager 20 sends a report to the Broker/Dealer 22 via a secure electronic transfer protocol connection indicating the amount of investment for each employee listed in the Consolidated Daily Total. The investment amount for each employee will be reduced by the technical support fee for that transaction.

In response to receiving the Investment Amount/Technical Support Fee from the Information Manager 20, the Company's Bank 52 sends an amount equal to the Technical Support Fee to the Information Manager and an amount equal to the Daily Investment Total to the Investment Provider 18 using a financial data transfer system such as EDI (electronic data protocol) or ACH (automatic clearinghouse) protocol. The Broker/Dealer 22 sends information to the Investment Provider 18, using a secure electronic transfer protocol, that specifies how the Daily Investment Total received from the Company's Bank 52 should be allocated between employee accounts, and how the money in the individual accounts should be invested.

After the Investment Provider 18 has invested the money in accordance with the Individual Investment information from the Broker/Dealer 22, the Investment Provider 18 sends a three reports to the Broker/Dealer 22 via a secure electronic transfer protocol connection: (1) a confirmation of the money received from the Company's Bank 52, a confirmation of the money invested for each account and a daily position log, which specifies the current position of each employee, whether or not the employee made a investment on that day. The Broker/Dealer forwards the confirmations to the Information Manager 20, which sends e-mail to each employee who made an investment on that day, specifying the amount and investment type. The employees can also access investment information from the Account Manager 20 electronically using a Web Browser or bulletin board connection.

Figure 4b operates similarly to Figure 4a, except that the Broker/Dealer 22 is involved in the transfer of money. In Figure 4b, as in Figure 4a, the POS 40 or Adjunct Investment Processor 42 for each restaurant uploads gratuity information and other sales information to the main company processor 50. The Consolidated Daily Total is generated by the main company processor 50, listing information that specifies the amount of investment withheld from gratuities for

each employee. This information is uploaded to the Information Manager 20, typically through a telephone or Internet connection, along with any changes to the employee profiles.

The Information Manager 20 processes information from the Consolidated Daily Total from the main company processor 50. The Information Manager 20 calculates the Technical Support Fee and invoices to the Company's Bank 52. The Information Manager 20 also calculates the Daily Investment Total and sends that information to the Company's Bank 52. In addition, the Information Manager 20 sends a report to the Broker/Dealer 22 indicating the amount of investment for each employee listed in the Consolidated Daily Total. The investment amount for each employee will be reduced by the technical support fee for that transaction.

In response to receiving the Investment Amount/Technical Support Fee from the Information Manager 20, the Company's Bank 52 sends an amount equal to the Technical Support Fee to the Information Manager 20 and sends an amount equal to the Daily Investment Total to the Broker/Dealer 22. The Broker/Dealer 22 transfers the money from the Company's Bank 52 to the Investment Provider and sends information to the Investment Provider 18 that specifies how the Daily Investment Total received from the Company's Bank 52 should be allocated between employee accounts, and how the money in the individual accounts should be invested. In one embodiment, the Broker/Dealer 22 may hold money in a holding account until a threshold is met; once the threshold is met, then the money is transferred to the individual's account with the Investment Provider 18.

After the Investment Provider 18 has invested the money in accordance with the Individual Investment information from the Broker/Dealer 22, the Investment Provider 18 sends the confirmations and daily position log to the

Broker/Dealer 22. The Broker/Dealer 22 forwards the confirmation to the Information Manager 20, which sends e-mail to each employee who invested that day. The employees can access information from the Account Manager 20 electronically using a Web Browser or bulletin board connection.

As stated above, the information manager 20 can generate support fees. In addition, the information manager 20 may charge a licensing fee from the restaurant and may receive a marketing fee from the Investment Provider 18. The Broker/Dealer 22 may receive a fee on the total amount of investment assets and may receive a commission or finder's fee from the Investment Provider 18.

Figure 5 illustrates a block diagram of a self-deposit terminal 24 which may also be used in connection with the Account Manager 16 for providing a convenient way for participants to add money to their investment accounts. The self-deposit terminal 24 has an account reader 60 for reading a participant's account information card, in which account information is encoded using, for example, a magnetic strip or a semiconductor memory. Other identification, such as a PIN (personal identification number), voice sample, or fingerprint, could also be required. A currency reader 62, similar to those used in vending machines, would verify the amount of cash inserted into the self-deposit terminal 24. This amount would be credited to the participant's account. Self-deposit terminals 24 could also allow an employee to monitor account information, such as account balances, and to modify investment preferences.

It is envisioned that self-deposit terminals 24 could be available in easily accessible locations, such as convenience stores, to allow participants to add to their accounts. The self-deposit terminals 24 could be slightly modified ATM (automatic teller machines), which are already available in many locations. Participants may use the machines to add discretionary amounts to their accounts - either in addition to the withholding or in lieu of a withholding.

Additionally, a participant who was not employed by an employer on the system could use the self-deposit terminals 24 to interact with the Account Manager.

As an alternative, the self-deposit terminals 24 could be administered by store personnel, who would receive the money and credit the account, similar to money order purchases. This would allow a human to verify the deposit before crediting an account.

In addition to workers who receive a portion of their money through tips/commissions, the investment system could be used in any situation where automatic payroll deduction was available, whether or not gratuities are part of the workers income. In particular, hourly and/or salaried employees, such as salespeople, clerks, mechanics, clerical and administrative staff, technicians, taxi and bus drivers, to name a few, would gain access to investment possibilities using the system described herein.

The present invention provides several significant benefits. From the standpoint of the employee, relatively small amounts of money can be withheld for saving and investing into individual accounts. Additionally, the withholding could be combined with the withholding from other employees to create a fund that can be invested in investment vehicles which would be otherwise unavailable. The accounts are portable between participating employers; therefore, investments follow the employee to each new employer without penalty. The employee can design a withholding plan as a percentage of wages and/or gratuities/commissions or a fixed amount, or a combination of both, which is painless in the short term, but will provide significant savings in the long term.

From the standpoint of the employer, a program can be offered to employees as a benefit at a minimal cost to the employer. This will help attract and retain employees. Additionally, this revolutionary new benefit is flexible

and can be combined with incentive plans provided by the account manager and/or employer. Administration of the investment plan can be combined with existing POS systems for little or no extra effort. Further, a monetary incentive can be provided by the Account Manager to the employer, which may be used to offset the cost of implementing the investment plan, or may be used to reward employees.

While the present invention has been discussed in connection with investment providers who invest with primarily in stocks and bonds, the Investment Providers 18 could include financial institutions such as a bank or savings associations, or an insurance provider. Thus, the employee contributions could be invested in any combination of stocks, bonds, money market accounts, interest bearing savings accounts, or insurance policies.

Further, the functionality overall structure shown in Figures 4a and 4b could be modified in several ways. For example, if the Investment Provider 18 controlled the Broker/Dealer 22 and/or the Information Manager 20, it could consolidate their functions with its own investment functions. Further, the POS 18 could be combined with either the Broker/Dealer 22 or Information Manager 20, or both. In one such scenario, the POS 18 would be available to companies of an Internet connection (or other communications link), whereby it could consolidate information from multiple physical locations.

Although the Detailed Description of the invention has been directed to certain exemplary embodiments, various modifications of these embodiments, as well as alternative embodiments, will be suggested to those skilled in the art. The invention encompasses any modifications or alternative embodiments that fall within the scope of the Claims.